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     FILE 'REGISTRY' ENTERED AT 18:57:18 ON 24 AUG 2004
L1                STRUCTURE UPLOADED
L2              5 S L1
L3            167 S L1 SSS FULL
L4                STRUCTURE UPLOADED
L5              2 S L4  SUB=L3 SAMPLE
L6             38 S L4 SSS FULL SUB=L3

     FILE 'CAPLUS' ENTERED AT 19:01:53 ON 24 AUG 2004
L7            110 S L6
L8              2 S L7 AND PATENT/DT
                  S L7 NOT  526-13-6/REG#

     FILE 'REGISTRY' ENTERED AT 19:04:01 ON 24 AUG 2004
L9              1 S 526-13-6/RN

     FILE 'CAPLUS' ENTERED AT 19:04:01 ON 24 AUG 2004
L10            86 S L9
L11            24 S L7 NOT L10
L12            23 S L11 NOT L8
L13               STRUCTURE UPLOADED
                  S L13

     FILE 'REGISTRY' ENTERED AT 19:10:07 ON 24 AUG 2004
L14             0 S L13  SUB=L3 SAMPLE

     FILE 'CAPLUS' ENTERED AT 19:10:12 ON 24 AUG 2004
L15             0 S L14 SUBSET=L3

     FILE 'REGISTRY' ENTERED AT 19:10:24 ON 24 AUG 2004
L16             0 S L13  SUB=L3 SAMPLE
L17             0 S L13 SSS FULL SUB=L3
L18             0 S L13
L19             0 S L13 SSS FULL

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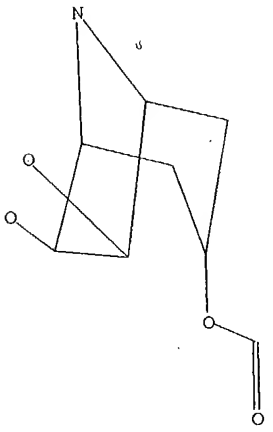

Structure attributes must be viewed using STN Express query preparation.

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L4 HAS NO ANSWERS
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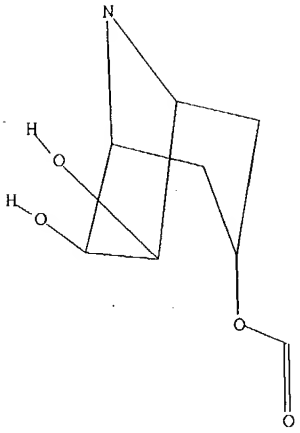

Structure attributes must be viewed using STN Express query preparation.

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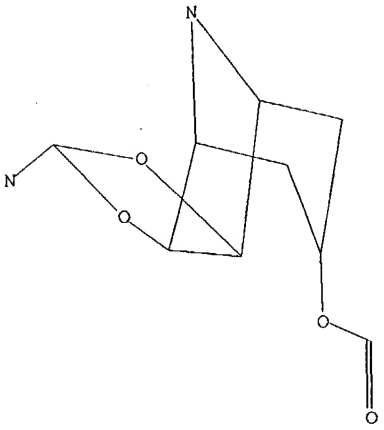
L13 HAS NO ANSWERS
L13 STR



10764922

=> d bib abs hitstr 1-2

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:972072 CAPLUS
DN 140:27968
TI Technical method for producing tropenol
IN Banholzer, Rolf; Bodenbach, Gisela; Mathes, Andreas; Meissner, Helmut; Specht, Peter
PA Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G., Germany
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT **Patent**
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003101986	A1	20031211	WO 2003-EP5158	20030516
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10224091	A1	20031211	DE 2002-10224091	20020531
	US 2003236409	A1	20031225	US 2003-448493	20030529
	US 6747153	B2	20040608		
	US 2004158069	A1	20040812	US 2004-764922	20040126
PRAI	DE 2002-10224091	A	20020531		
	US 2002-407121P	P	20020830		
	US 2003-448493	A1	20030529		

OS CASREACT 140:27968; MARPAT 140:27968
GI

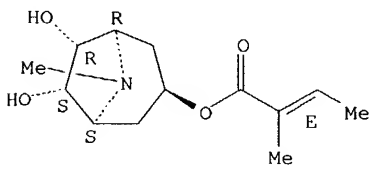
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a novel, tech. applicable production method for preparing tropenol (I), optionally in the form of hydrates or acid addition salts, from tropanetriol ester II [R = C1-4-alkyl, C2-6-alkenyl, C1-4-alkylene-Ph (optionally substituted with OH or C1-4-alkoxy)] via reaction with (R'')2NCH(OR')2 (R' = Me, Et; R'' = Me, Et, CH2Et), an elimination reaction of acetals III and deacylation of esters IV. Thus, tiotropium bromide was prepared from meteloidin [II; R = CMe:CHMe-(E)], via reaction with Me2NCH(OMe)2, elimination reaction of acetal III, hydrolysis of ester IV with NaOH in aqueous EtOH, transesterification by I of di(2-thienyl)glycolic acid Me ester, stereoselective epoxidn. with vanadium(V) oxide in DMF, and N-methylation with MeBr.

IT **526-13-6**, Meteloidin
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with DMF di-Me acetal; tech. method for producing tropenol)

RN 526-13-6 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (1R,3-endo,5S,6S,7R)-6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, (2E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

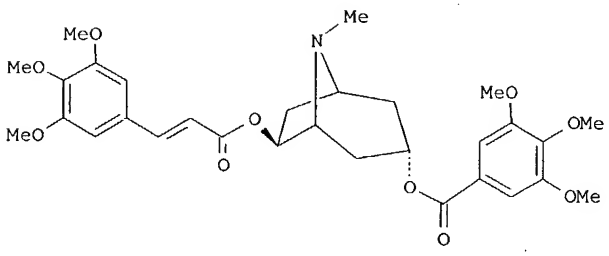
10764922

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:814128 CAPLUS
DN 137:322727
TI Isolation of tropane alkaloid multidrug resistance inhibitors from Erythroxylum pervillei and their use for treatment of cancer and infections
IN Kinghorn, A. Douglas; Pezzuto, John M.
PA The Board of Trustees of the University of Illinois, USA
SO PCT Int. Appl., 108 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002083669	A1	20021024	WO 2002-US11358	20020411
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003092729	A1	20030515	US 2002-119874	20020410
	EP 1392685	A1	20040303	EP 2002-762037	20020411
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2002008791	A	20040309	BR 2002-8791	20020411
PRAI	US 2001-283394P	P	20010412		
	WO 2002-US11358	W	20020411		

GI

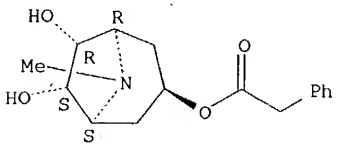


AB The methods that utilize compds. derived from Erythroxylum pervillei and which modulate the activity of P-glycoproteins are disclosed. The compds. overcome multidrug resistance and can be used therapeutically to enhance performance of therapeutic drugs, like chemotherapeutic drug and antibiotics. Thus, new compds. pervilleine A, B (I), C, D, E, F and A N-oxide were isolated from Erythroxylum pervillei along with two known tropane alkaloid esters; they were characterized by NMR and tested for bioactivity. Pervilleine B (I) was tested for in vitro cytotoxicity against human cancer cell lines [ED50 = 9.4 μg/mL (BCI); ED50 = 3.1 μg/mL (Lu1); ED50 = 1.3 μg/mL (Col2); ED50 = 0.1 μg/mL (KB-V1+); ED50 = 8.8 μg/mL (KB-V1-); ED50 = 1.0 μg/mL (LNCaP); ED50 = 3.2 μg/mL (SW626)], multidrug resistance [IC50 = 3.8 μM (SKOV3 ovarian adenocarcinoma); IC50 = >10 μM (BSKVLB ovarian adenocarcinoma); IC50 = 0.12 μM (SKVLB)] and the relationship of MDR-reversing activity and physicochem. properties [IC50 = >35 μM (KB-3); IC50 = 15 μM (KB-V); IC50 = 0.17 μM (KB-V, done in the presence of vinblastine)].

IT **104086-63-7**, Tropane-3α,6β,7β-triol 3-phenylacetate
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(isolation, NMR, crystal structure and bioactivity of; tropane alkaloid multidrug resistance inhibitors from Erythroxylum pervillei and their

use for treatment of cancer and infections)
RN 104086-63-7 CAPLUS
CN Benzeneacetic acid, (1R,3-endo,5S,6S,7R)-6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



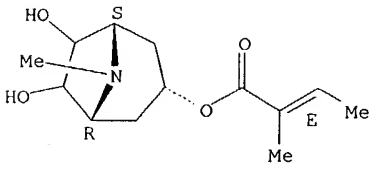
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10764922

=> d 1, 5, 10, 15, 20, 23 bib abs hitstr

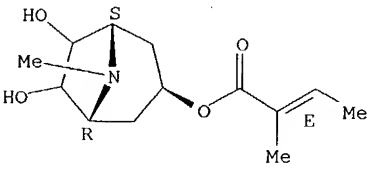
L12 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:716925 CAPLUS
DN 140:108110
TI Alkaloids of Datura ceratocaula
AU Berkov, Strahil
CS Department of Applied Botany, Institute of Botany, Bulgarian Academy of Sciences, Sofia, 1113, Bulg.
SO Zeitschrift fuer Naturforschung, C: Journal of Biosciences (2003), 58(7/8), 455-458
CODEN: ZNCBDA; ISSN: 0939-5075
PB Verlag der Zeitschrift fuer Naturforschung
DT Journal
LA English
AB Thirty-six alkaloids were identified in the organs of Datura ceratocaula by GC/MS. Thirty-three of them have not been previously reported for the species. Furthermore, a new tropane ester was tentatively identified as 3-(3'-formyloxytropoyloxy)tropane on basis of its mass spectral fragmentation. Hyoscyamine was the main alkaloid in the plant organs.
IT **646063-97-0 646063-98-1**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(alkaloids of Datura ceratocaula)
RN 646063-97-0 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (3-endo)-6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, (2E)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



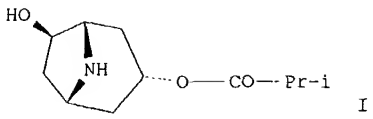
RN 646063-98-1 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (3-exo)-6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, (2E)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:348260 CAPLUS
DN 137:75928
TI New tropane alkaloids from Erythroxylum moonii
AU Khattak, Khanzadi Fatima; Atta-ur-Rahman; Choudhary, Mohammad Iqbal; Hemalal, K. D.; Tillekeratne, L. M.
CS H.E.J. Research Institute of Chemistry, University of Karachi, International Center for Chemical Sciences, Karachi, 75270, Pak.
SO Journal of Natural Products (2002), 65(6), 929-931
CODEN: JNPRDF; ISSN: 0163-3864
PB American Chemical Society
DT Journal
LA English
GI



I

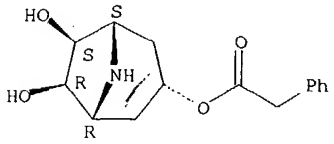
AB Four new tropane alkaloids were isolated from the leaves of Erythroxylum moonii and identified as 3α-isobutyryloxy-7β-hydroxynortropane (e.g. I), 3α-hydroxy-7β-phenylacetoxynortropane, 3α-cis-cinnamoyloxytropane, and 3α-hydroxy-6β-(3'-hydroxy-2'-methyl-3'-phenylpropionyloxy)-7β-hydroxytropane. Other alkaloids isolated for the first time from E. moonii were 3α-benzoyloxytropane, 3α-phenylacetoxytropane, 3α-trans-cinnamoyloxytropane, and 3α-phenylacetoxy-6β,7β-dihydroxynortropane. The structures of the new compds. were elucidated by spectroscopic methods.

IT **439791-52-3**, 3α-Phenylacetoxy-6β,7β-dihydroxynortropane
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tropane alkaloids from Erythroxylum moonii)

RN 439791-52-3 CAPLUS

CN Benzeneacetic acid, (1R,3-endo,5S,6S,7R)-6,7-dihydroxy-8-azabicyclo[3.2.1]oct-3-yl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:175556 CAPLUS

DN 112:175556

TI Alkaloids of the genus Erythroxylum. Part 10. Alkaloids of Erythroxylum hypericifolium leaves

AU Al-Said, Mansour S.; Evans, William C.; Grout, Raymond J.

CS Dep. Pharm. Sci., Univ. Nottingham, Nottingham, NG7 2RD, UK

SO Phytochemistry (1989), 28(11), 3211-15
CODEN: PYTCAS; ISSN: 0031-9422

DT Journal

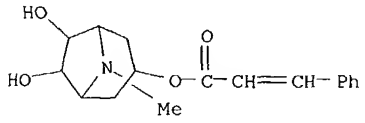
LA English

AB Fifteen alkaloids were characterized from the leaves of E. hypericifolium; the majority are esters of cinnamic and benzoic acids. 3α-Cinnamoyloxytropan-6β-ol is the main base. New alkaloids reported are 3β-cinnamoyloxytropane, 3α,6β-dicinnamoyloxytropane, 3-cinnamoyloxynortropan-6-ol, 6β-acetoxy-3α-cinnamoyloxytropane and, tentatively, 6-phenylacetoxytropan-3-ol. Two mixed cinnamate dimers were also found. Some syntheses are reported and the chemotaxonomic implications of the results are discussed.

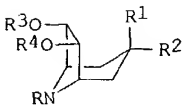
IT **117005-30-8**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of Erythroxylum hypericifolium)

RN 117005-30-8 CAPLUS

CN 2-Propenoic acid, 3-phenyl-, 6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester (9CI) (CA INDEX NAME)



L12 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1979:39083 CAPLUS
DN 90:39083
TI Synthesis of betalains
AU Buchi, George; Fliri, Hans; Shapiro, Rafael
CS Dep. Chem., Massachusetts Inst. Technol., Cambridge, MA, USA
SO Journal of Organic Chemistry (1978), 43(25), 4765-9
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
GI



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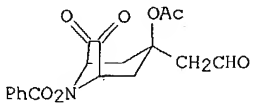
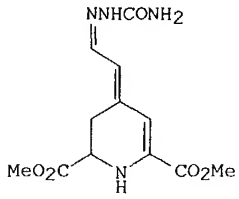
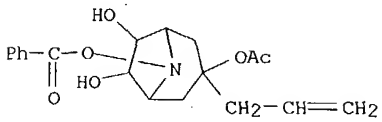


II



III

AB N-Benzylnorteloidinone (I, R = PhCH2, R1R2 = O, R3 = R4 = H), prepared by Robinson-Schopf synthesis, was converted to the ortho ester I (R = PhCH2 with HC(OMe)3. Catalytic debenzylation of I (R1R2 = O, R3R4 = MeOCH) followed by addition of allylmagnesium bromide gave the carbinol, which was transformed to the I (R = PhCO2, R1 = OH, R2 = H2C:CHCH2, R3R4 = MeOCH) with benzoyl peroxide. Acetylation of the tertiary carbinol was followed by hydrolysis of the ortho ester to the diol. Consecutive oxidns. of the diol to the α-diketone with dimethyl sulfide-N-chlorosuccinimide, and of the olefin to the aldehyde with ozone, gave the diketo aldehyde II. Treatment of II with lead Ph(OAc)4 in MeOH-C6H6 gave a di-Me ester which, upon chromatog. over silica gel, lost both AcOH and BzOH to give di-Me betalamate, characterized by a crystalline semicarbazone (III) of unknown stereochem. Conversion of III to indicaxanthin and betanidin was accomplished using known procedures.
IT **63321-97-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 63321-97-1 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-3,6,7-triol, 8-(benzoyloxy)-3-(2-propenyl)-, 3-acetate, (3-endo,6-exo,7-exo)- (9CI) (CA INDEX NAME)



L12 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1972:549747 CAPLUS
DN 77:149747
TI Biosynthesis of the isovaleryl and senecioyl moieties of tropane alkaloids
AU Achari, R. G.; Court, W. E.; Newcombe, F.
CS Sch. Org. Chem., Univ. Bradford, Bradford/Yorkshire, UK
SO Planta Medica (1972), 22(1), 38-41
CODEN: PLMEAA; ISSN: 0032-0943
DT Journal
LA English

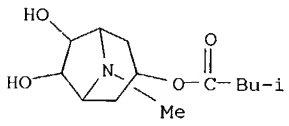
10764922

AB Incorporation of radioactivity from L-leucine-U-14C and L-valine-U-14C into 8 alkaloids extracted from Datura sanguinea and D. stramonium plants indicated that both amino acids can act as precursors to several isovalery and senecioyl moieties of the tropane alkaloids, including 3-senecioyl-, 3-isovaleryl-, 3,6-disenecioyl-, and 3,6-diisovaleryl esters of oxytropane; 3,6-disenecioyl- and 3,6-divalerylesters of oxytropane-7-ol, and 3-senecioyl and 3-isovaleryl- esters of oxytropane-6,7-diol.

IT **38753-89-8**
RL: BIOL (Biological study)
(formation of isovaleryl moiety of)

RN 38753-89-8 CAPLUS

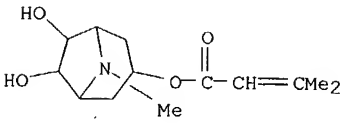
CN Butanoic acid, 3-methyl-, 6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester (9CI) (CA INDEX NAME)



IT **38753-88-7**
RL: BIOL (Biological study)
(formation of senecioyl moiety of)

RN 38753-88-7 CAPLUS

CN 2-Butenoic acid, 3-methyl-, 6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester (9CI) (CA INDEX NAME)



L12 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1955:20108 CAPLUS

DN 49:20108

OREF 49:3987g-i,3988a-e

TI The synthesis of dihydrometeloidine and related compounds

AU Sheehan, John C.; Bissell, Eugene R.

CS Massachusetts Inst. of Technol., Cambridge

SO Journal of Organic Chemistry (1954), 19, 270-6
CODEN: JOCEAH; ISSN: 0022-3263

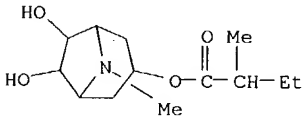
DT Journal

LA Unavailable

AB Dihydrometeloidine (I), structurally related to meteloidine, a natural oxygenated tropane alkaloid, has been synthesized. Teloidinone (II) (3.4 g.) and 4.2 g. p-MeC6 H 4SO3H.H2O in 40 cc. BzH are kept 48 hrs. at 20°, ether is added, the precipitate mixed with 50 cc. N NaOH, and extracted with C6H6, giving 89% benzylideneteloidinone (III), prismatic needles, m. 150-1° [HBr salt, needles, m. 215-16° (decomposition); p-toluenesulfonate, m. 202-3° (decomposition)]. Hydrogenation of 1.95 g. III in 200 cc. 70% EtOH with W-4 Raney Ni at 20° 3-6 hrs. gives 89.5% benzylideneteloidine (IV), needles, m. 163-5° after sublimation at 120°/0.05 mm. [picrate, yellow needles, m. 189-90° (decomposition); HBr salt, m. 236-7° (decomposition)]. Adding Na to 260 mg. IV in 25 cc. liquid NH3, until the blue color persists 1 hr., decomposing the mixture with 500 mg. NH4Cl, and evaporating the NH3 give 50 mg. teloidine, m. 166-8° (decomposition). Treating 1 g. IV with 6 cc. α-methylbutyric anhydride in 6 cc. C5H5N 24 hrs., concentrating the mixture in vacuo, taking up the residue in 25 cc. N HCl, extracting with ether, making the aqueous solution alkaline with 6 cc. 6N NaOH, and again extracting with ether give 61% benzylidene-α-methylbutyrylteloideine (V).HBr, platelets, m. 237.5-8.5° (decomposition) (picrate, yellow needles, m. 161-2°). Hydrogenating 500 mg. V in 10 cc. AcOH with 200 mg. prereduced 30% Pd-C at 20° gives 95.5% I, needles, m. 96-7° [HBr salt, platelets, m. 216-17° (decomposition)]. Treating 1 g. IV in 6 cc C5H5N with 4 cc. Ac2O 24 hrs. at 20° gives 80% benzylideneacetylteloideine (VI), m. 110.5-11.5° [HBr salt, needles, m. 276-7° (decomposition)]. Hydrogenolysis of 500 mg. VI gives 85% acetylteloideine (VII), m.

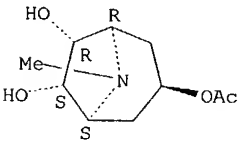
178.5-9.5° (decomposition) [HBr salt, m. 207-8° (decomposition)]. Acetylation of teloidine or VII with Ac 2O-C5H5N at 20° gives 65% teloidine triacetate, m. 84.5-5.5°. Treating 260 mg. IV in 10 cc. ether with 220 mg. Ph2C:CO 20 hrs. at 20°, evaporating the mixture, and neutralizing the residue with HBr give 83% benzylidenediphenylacetylteloid eine-HBr, platelets, m. 256-7° (decomposition) [methiodide, m. 205-6° (decomposition)]. Refluxing 3.4 g. II and 4.2 g. p-MeC6H 4SO3H.H2O in 500 cc. Me2CO 24 hrs., adding 100 cc. 0.5N NaOH, evaporating the Me2CO, and extracting the residual solution with ether give 82.3% isopropylideneteloidinone (VIII), needles, m. 89-90° [picrate, yellow needles, m. 214-15°; HBr salt, m. 241.5-2.5°; methiodide, prisms, m. 227-8° (decomposition)]. Hydrogenation of VIII gives 94.3% isopropylideneteloidine (IX), m. 131-3° [HBr salt, needles, m. 195.5-6.5°]. Heating 215 mg. IX with 10 cc. N HCl 15 min. gives teloidine-HCl, m. 307-8° (decomposition). Isopropylideneacetylteloideine, prepared in 77% yield in the same way as VI, prismatic needles, m. 73.5-5° [picrate, yellow needles, m. 213-14°; HCl salt, prisons, m. 289-90° (decomposition); HBr salt, needles, m. 295-6° (decomposition)]. Isopropylidenediphenylacetylteloid eine-HBr m. 165-6.5°; methiodide, needles, m. 211-12°. Heating 215 mg. IX with 785 mg. BzCl 2 hrs. gives 38% isopropylidenebenzoylteloideine-HBr, m. 264-5° (decomposition). Refluxing 3.4 g. II and 4.2 g. p-MeC6H4SO3H.H2O in 500 cc. Me2CO, adding 100 cc. 0.5N NaOH, distilling off the Me2CO in vacuo, concentrating the aqueous solution, treating the residue with 1.5 g. NaBH4 at 20°, extracting the mixture 24 hrs. with CH2Cl2, and subliming the residue of the CH2Cl2 extract give 50% isopropylidenepseudoteloidine (X), prisms, m. 121-3° [HCl salt, m. 250-1°; HBr salt, prisms, m. 249-50° (decomposition)]. Hydrolysis of 215 mg. X 15 min. with 10 cc. N HCl gives 87% pseudoteloidine-HCl, m. 265-6° (decomposition). Isopropylideneacetylpseudoteloideine, prepared in 83.7% yield similarly to VI, m. 125-6.5°.

IT **4074-15-1**, Meteloidine, dihydro-
(and derivs.)
RN 4074-15-1 CAPLUS
CN 1αH,5αH-Tropane-3α,6β,7β-triol, 3-(2-methylbutyrate) (8CI) (CA INDEX NAME)



IT **109655-83-6**, Teloidine, 3-acetate
(preparation of)
RN 109655-83-6 CAPLUS
CN Teloidine, 3-acetate (6CI) (CA INDEX NAME)

Relative stereochemistry.



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FILE 'REGISTRY' ENTERED AT 18:57:18 ON 24 AUG 2004

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L3	167	S L1 SSS FULL
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L5	2	S L4 SUB=L3 SAMPLE
L6	38	S L4 SSS FULL SUB=L3

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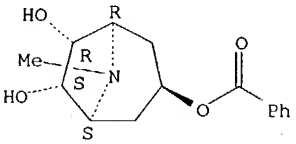
L12 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:297065 CAPLUS
DN 140:2784
TI Nortropane alkaloids from the leaves of Erythoxylum moonii
AU Khattak, Khanzadi Fatima; Atta-ur-Rahman; Choudhary, M. Iqbal
CS Int. Centre for Chem. Sci., H.E.J., Res. Inst. of Chem., Univ. of Karachi, Karachi, 75270, Pak.
SO Heterocycles (2003), 60(4), 917-924
CODEN: HTCYAM; ISSN: 0385-5414
PB Japan Institute of Heterocyclic Chemistry
DT Journal
LA English
AB Four new nortropane alkaloids have been isolated from the leaves of Erythroxylum moonii and identified as nortropane-3α-6β-7β-triol 3-benzoate 7-(2'-hydroxy-3'-phenylpropanoate) (1), nortropane-3α-7β-diol 7-trans-cinnamate 3-propanoate (2), nortropane-3α-7β-diol 7-benzoate 3-(2'-methylpropanoate) (3), and nortropane-3α-7β-diol 3-(2'-methylpropanoate) 7-cis-(3'',4'',5''-trimethoxycinnamate) (4). Addnl., five known bases are characterized as tropane-3α-7β-diol 7-benzoate (5), tropane-3α-7β-diol 3-phenylacetate (6), tropane-3α-7β-diol 3-benzoate (7), tropane-3α-6β-7β-triol 3-benzoate (8), and tropane-3α-yl 3-(3',4',5'-trimethoxybenzoate) (9). The structures for the compds. are proposed on the basis of spectroscopic evidences.
IT **117005-29-5**
RL: NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)
(nortropane alkaloids from leaves of Erythroxylum moonii)
RN 117005-29-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-3,6,7-triol, 8-methyl-, 3-benzoate, (1R,3-endo,5S,6S,7R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

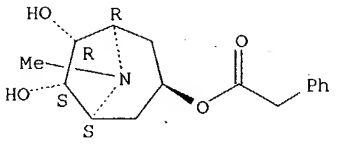


RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:841082 CAPLUS
DN 136:131532
TI Modulation of the Multidrug-Resistance Phenotype by New Tropane Alkaloid Aromatic Esters from Erythroxylum pervillei
AU Silva, Gloria L.; Cui, Baoliang; Chavez, Daniel; You, Min; Chai, Hee-Byung; Rasoanaivo, Philippe; Lynn, Sean M.; O'Neill, Melanie J.; Lewis, Jane A.; Besterman, Jeffrey M.; Monks, Anne; Farnsworth, Norman R.; Cordell, Geoffrey A.; Pezzuto, John M.; Kinghorn, A. Douglas
CS Program for Collaborative Research in the Pharmaceutical Sciences and Department of Medicinal Chemistry and Pharmacognosy College of Pharmacy, University of Illinois at Chicago, Chicago, IL, 60612, USA
SO Journal of Natural Products (2001), 64(12), 1514-1520

CODEN: JNPRDF; ISSN: 0163-3864
PB American Chemical Society
DT Journal
LA English
AB Nine tropane alkaloid aromatic esters (1-9) were isolated from the roots of Erythroxylum pervillei by following their potential to reverse multidrug-resistance with vinblastine-resistant oral epidermoid carcinoma (KB-V1) cells. All isolates, including seven new structures (3-9), were evaluated against a panel of human cancer cell lines, and it was found that alkaloids 3 and 5-9 showed the greatest activity with KB-V1 cells assessed in the presence of vinblastine, suggesting that these new compds. are potent modulators of P-glycoprotein. Confirmatory results were obtained with human ovarian adenocarcinoma (SKVLB) cells evaluated in the presence of adriamycin and synergistic studies performed with several cell lines from the NCI tumor panel. The structures of the new compds. were determined using spectroscopic techniques. Single-crystal X-ray anal. was performed on the monoester, tropane-3α,6β,7β-triol 3-phenylacetate (1).
IT **104086-63-7,** Tropane-3α,6β,7β-triol 3-phenylacetate
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); BIOL (Biological study); OCCU (Occurrence)
(modulation of the multidrug-resistance phenotype by new tropane alkaloid aromatic esters from Erythroxylum pervillei)
RN 104086-63-7 CAPLUS
CN Benzeneacetic acid, (1R,3-endo,5S,6S,7R)-6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, rel- (9CI) (CA INDEX NAME)

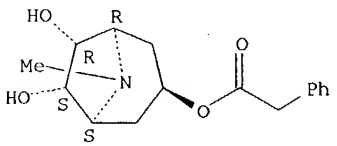
Relative stereochemistry.



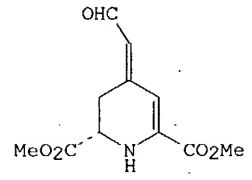
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:404229 CAPLUS
DN 111:4229
TI Alkaloids of the genus Erythroxylum. Part 9. Alkaloids of Erythroxylum hypericifolium stem bark
AU Al-Said, Mansour S.; Evans, William C.; Grout, Raymond J.
CS Dep. Pharm. Sci., Univ. Nottingham, Nottingham, NG7 2RD, UK
SO Phytochemistry (1989), 28(2), 671-3
CODEN: PYTCAS; ISSN: 0031-9422
DT Journal
LA English
AB Thirteen bases were characterized from the stem bark of E. hypericifolium; hygrine is the principal component. As in the root bark esters of phenylacetic acid predominate; other alkaloids involve acetic, benzoic, and trimethoxycinnamic acids. Alkaloids reported for the first time are 3α-phenylacetoxynortropan-6β-ol, 6β-acetoxy-3α-benzoyloxytropane, and 3-acetoxy-6-phenylacetoxytropane.
IT **104086-63-7**
RL: BIOL (Biological study)
(from Erythroxylum hypericifolium stem bark)
RN 104086-63-7 CAPLUS
CN Benzeneacetic acid, (1R,3-endo,5S,6S,7R)-6,7-dihydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L12 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1977:439714 CAPLUS
DN 87:39714
TI Synthesis of betalamic acid
AU Buechi, George H.; Fliri, Hans; Shapiro, Rafael
CS Dep. Chem., Massachusetts Inst. Technol., Cambridge, MA, USA
SO Journal of Organic Chemistry (1977), 42(12), 2192-4
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
GI



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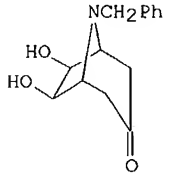
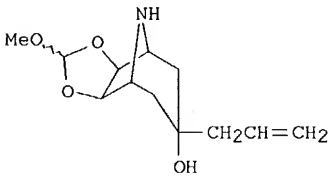
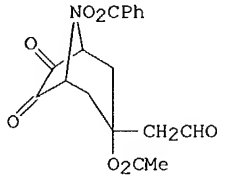


II

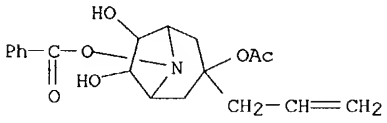


III



IV

AB Betalamic acid dimethyl ester (I) was prepared from N-benzylnorteloidinone (II) via the carbinol III and aldehyde IV in 9 steps.
IT **63321-97-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)
RN 63321-97-1 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-3,6,7-triol, 8-(benzoyloxy)-3-(2-propenyl)-, 3-acetate, (3-endo,6-exo,7-exo)- (9CI) (CA INDEX NAME)



L12 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1968:484182 CAPLUS
DN 69:84182
TI Alkaloid production in Datura hybrids
AU Lubis, I.
CS Lembaga Biol. Nas., Bogor, Indonesia
SO Annales Bogorienses (1967), 4(3), 163-90
CODEN: ABOGAT; ISSN: 0517-8452
DT Journal
LA English
AB Alkaloid contents of the roots of Datura hybrid plants of 6 generations, produced by crossing D. ferox and D. stramonium, were determined F-1 generation plants contained hycocyamine (I) 350, hycoscine (II) 160, 3α-tigloyloxytropane (III) 85, meteloidine (IV) 190, 7-hydroxy-3,6-ditigloyloxytropane (V) 400, 3,6-ditigloyloxytropane (VI) 60 mg./kg. of roots, and small amts. of tropane and an unidentified alkaloid. F-5 generation plants contained I 155, II 600, III 300, IV 355, V 200, and VI 77 mg./kg. of roots. All 6 alkaloids were detected in the roots of the

F2-F5 generation plants, but only I and II were found in the roots of F-6 plants. Unlike the case of the aerial parts of the hybrid plants, where the alkaloid characteristic of the parent D. ferox (high content of II) was dominant, the roots contained a high proportion of I up to the F-4 generation, a characteristic feature of D. stramonium. This difference was due to the inheritance of another independent genetic factor, namely the epoxidizing ability of the aerial parts, which is responsible for the formation of II from I. Variation in the amts. of III, IV, and V in the roots up to the F-5 generation indicated a tendency toward adoption of D. ferox characteristics.

IT **21631-92-5**
RL: BIOL (Biological study)
(in Datura ferox and stramonium)
RN 21631-92-5 CAPLUS
CN 1αH,5αH-Tropane-3β,6β,7β-triol,
3-(2-methylcrotonate), (E)- (8CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.